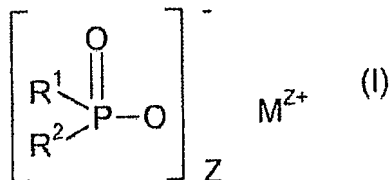


WHAT IS CLAIMED IS:

1. A composition based on a thermoplastic matrix comprising a flame-retardant system comprising at least:

- 5 - one compound (F1) of formula (I):



in which:

10 R¹ and R² are identical or different and represent a linear or branched alkyl chain comprising from 1 to 6 carbon atoms and/or an aryl radical; M represents a calcium, magnesium, aluminum and/or zinc ion; Z represents 2 or 3;

15 - one compound (F2) which is a reaction product between phosphoric acid and melamine and/or a reaction product between phosphoric acid and a melamine condensation derivative; and

20 - one compound (F3) which is a melamine condensation derivative; said composition comprising at least 13% by weight of compounds F1 and F2, preferably at least 15%, with respect to the total weight of the composition.

25 2. The composition as claimed in claim 1, characterized in that it comprises from 1 to 50% by weight of the flame-retardant system comprising at least the compounds F1, F2 and F3, with respect to the total weight of the composition.

30 3. The composition as claimed in claim 1 to 2, characterized in that it comprises from 1 to 30% by weight of compound F1.

4. The composition as claimed in any one of claims 1 to 3, characterized in that it comprises from 1 to 20% by weight of compound F2.

5 5. The composition as claimed in any one of claims 1 to 3, characterized in that it comprises from 0.1 to 20% by weight of compound F3.

6. The composition as claimed in any one of claims 1 to 7, characterized in that the phosphinic acid of the compound F1 is chosen from the group consisting of dimethylphosphinic acid, ethylmethylphosphinic acid, diethylphosphinic acid, methyl(n-propyl)phosphinic acid and their mixture.

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7. The composition as claimed in any one of claims 1 to 6, characterized in that the compound F2 is chosen from the group consisting of melamine polyphosphate, melam polyphosphate, melem polyphosphate and their mixture.

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8. The composition as claimed in any one of claims 1 to 7, characterized in that the compound F3 is chosen from the group consisting of melam, melem, melon and their mixture.

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9. The composition as claimed in any one of claims 1 to 8, characterized in that the thermoplastic matrix is chosen from the group consisting of: (co)polyamides; mono- or diolefin (co)polymers, such as polypropylene, polyisobutylene, polybutylene, polybutadiene, polyethylene; ethylene/propylene copolymers, the optionally grafted styrene copolymer, such as polystyrene, poly(p-methylstyrene), poly(α -methylstyrene); the copolymer of styrene or α -methylstyrene with dienes or with acrylics, such as styrene/butadiene, styrene/acrylonitrile, styrene/maleic anhydride; polyurethanes, polymers comprising halogens, such as

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polychloropropene, polymers derived from
 α,β -unsaturated acids, such as polyacrylate,
polymethacrylate, polyacrylonitrile, polyacrylamide,
unsaturated polymers derived from alcohols and from
5 amines, such as poly(vinyl alcohol), vinyl polymers and
their copolymers, such as poly(vinyl acetate),
poly(vinyl alcohol), poly(vinyl chloride); polyacetals,
such as polyoxymethylene, poly(phenylene oxide)s,
poly(phenylene ether)s, poly(phenylene sulfide)s,
10 polyureas, polyketones, polyimides, polyesters, such as
poly(ethylene terephthalate), poly(butylene
terephthalate), polycarbonates, polyester carbonates,
polysulfones, polyether sulfones, their derivatives and
their blends.

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10. The composition as claimed in claim 8,
characterized in that the (co)polyamide matrix
comprises at least one (co)polyamide chosen from the
group consisting of (co)polyamide 6; 4; 11; 12, 4.6;
20 6.6; 6.9; 6.10; 6.12; 6.18; 6.36; 6(T); 9(T); 6(I);
MXD6; their copolymers and blends.

11. The composition as claimed in any one of claims 1
to 10, characterized in that said composition comprises
25 reinforcing fillers chosen from the group consisting of
glass fibers, carbon fibers, inorganic fibers, ceramic
fibers, heat-resistant organic fibers; inorganic
fillers, such as wollastonite, kaolin, clay, silica and
mica, and inorganic nanofillers, such as
30 montmorillonite and α -Zr phosphate, and their mixtures.

12. The composition as claimed in any one of claims 1
to 11, characterized in that said composition comprises
flame-retardant agents or agents which are synergistic
35 with the flame-retardant system chosen from the group
consisting of ceramic powder, magnesium hydroxide,
hydrotalcites, magnesium carbonates and the other
alkaline earth metal carbonates, zinc oxide, zinc

stannate, zinc hydroxystannate, zinc phosphate, zinc borate, zinc sulfide, aluminum hydroxide, aluminum phosphate and red phosphorus, nitrogenous organic compounds belonging to the class of the triazines, such as melamine and/or its derivatives, such as melamine cyanurate.

13. A process for the manufacture of a composition as claimed in any one of claims 1 to 12, in which at least the thermoplastic matrix is blended with the flame-retardant system comprising at least the compounds F1, F2 and F3.

14. An article obtained by forming a composition as claimed in any one of claims 1 to 12.